

BY THE ELECTRIC LIMITED

How Travellers Will Be Hauled Over Roads Where Steam Now Does the Work—Electric Locomotives of the New Haven System Capable of Fast Time on Long Distance Runs.

(Special Correspondence.)
NEW YORK, November 18, 1905.—When the work of rebuilding the Grand Central Station here is completed, a long step will have been taken towards substituting electricity for steam as the motive power of American railroads. One of the most characteristic features of the new terminal will be the train shed with two tiers of tracks, one for suburban and one for through traffic, and as such an arrangement is impossible with steam locomotives, the two roads which use the station—the New York Central and the New York, New Haven and Hartford—are planning to bring their trains into the city by electricity.

That the New Haven road has already ordered 25 electric locomotives as a beginning of a new order of things is due to the fact that the road is preparing for the change. Of a new type, which is equally valuable for long-distance traffic and for short hauls, these locomotives will mark a new stage in the employment of electricity. Hitherto, though electric locomotives have successfully passed the experimental stage, their use has been confined, in the main, to places where the problem of ventilation makes steam engines impracticable. The Baltimore and Ohio Railroad has them for its tunnel through Baltimore, for example, and they will be used in the tunnels which the Pennsylvania Railroad is building under the Hudson and East Rivers here.

These locomotives, however, and these now building for the New York Central, are not designed to run any great distance from the central powerhouse, and in railroading they will play much the same role as is taken in water transportation by the tug which brings the ocean greyhound to her pier.

On the other hand, the revolution in city and suburban traffic brought by the increasing use of electricity has been accompanied by an extension of the principle of the trolley car. On the elevated railroad and in the subway in this city, for instance, each car is a train hauled by its own motor and no separate locomotive is required. The Long Island Railroad is rapidly installing a system of this kind in the western part of its territory, and similar trains are operated in other parts of the country, as between Stamford and New Canaan, and between Bristol and Hartford, in Connecticut.

However convenient a method which transforms a railroad into a glorified trolley line may be for short hauls, where there is an enormous amount of traffic to be handled—and all railroad men agree that it saves both time and money—it is not feasible on big systems already equipped with a full complement of cars and locomotives of the old type. To change to it would involve an expenditure beyond the reach of our wealthiest corporations, and, moreover, it is by no means certain that the results would prove satisfactory either to the railroad or its patrons.

In the type of electric locomotive adopted by the New Haven none of these objections to the general use of electricity in railroading is said to exist. Although no announcement has been made of the company's intention to make any change in its motive power except on the stretch between Woodlawn and the Grand Central station, where the improvements now under way necessitate it, the railroad does not bind to the possibilities of the new engines. Mechanical engineers have been met by the difficulty of transforming the alternating current generated in the power-house into a direct current powerful enough to operate trains at long distances from the central station. Theoretically, this difficulty can be overcome by dotting the line with substations where rotary converters transform the alternating current into a direct one; but practically this means such increased expense for maintenance, labor, fuel and other things that the old steam motive power is preferable.

By a device perfected within the last three years the electric locomotives of the New Haven road will transform the alternating current themselves, and in thus doing away with the necessity of expensive substations will remove one of the chief obstacles to the operation of through trains by electricity. With equal ease they can be operated between Woodlawn and Grand Central, and Woodlawn, where the New Haven's territory really begins, by a direct current, or run through the open country towards Beacon, converting the current into alternating form. Just how long it will be before electricity drives steam entirely out of the field is still a matter of mere guess-work, but the changes at the New York terminal and the improved type of engine are bringing the time appreciably near.

THE GRAND TRUNK PACIFIC RAILWAY

(Continued from First Page.)
Mr. Morse, "that will pay the interest on its bonds from the start. That country is so rich that settlements will spring up all along the road, and we shall be hauling out millions of bushels of wheat and other products within a year or so after the rails are laid. I don't dare to describe the richness of that region to the full. Any man who tells the truth about it to a stranger is looked upon by the latter as a visionary or a liar. We have there the richest wheat lands upon earth; better than those of the United States, better than any others of the world. This road goes through a strip of virgin soil which will raise twenty-five bushels and more wheat to the acre, proportion the power to the load than it is with steam. The average weight of a train is 120 tons, but this is often greatly exceeded. The heaviest train run on the New Haven for instance, weighs 700 tons. An ordinary sleeping car weighs 16 tons and when the tide of travel is at the flood the midnight express to Boston is often made up of ten or twelve cars; a train of 50 loaded freight cars—no uncommon sight—would also touch the maximum in weight.

With steam power one must either design a locomotive to pull 750 tons and submit to the waste involved in having such a powerful machine draw a load of half a load, or resort to the expedient, common in hilly country, of two engines utilized in a "double header" to pull heavy trains. "Double headers" are abominations to railroad men. They mean incessant jerks and jars, for the two locomotives cannot be run in perfect harmony; a great waste of force, since the effective combined drawing power is far from being the sum of that of each of the separate engines; and, finally, the employment of extra men.

With electricity all this waste is avoided. The New Haven's electric engines, with a speed of from eight to ninety miles an hour, will have a "pull" of 200 tons apiece. When necessary, any number of machines can be coupled together and operated as one engine, by one man. Thus a 20-ton train would require three locomotives, a 50-ton train two, and the ordinary light traffic can be drawn by a single engine. "The advantages derived from the possibility of combining at will these units of power are obvious.



MR. FRANK W. MORSE,
General Manager of Canada's New Highway.

and that strip contains four times as much wheat land as all the wheat-growing lands of the United States. About a hundred million bushels of wheat were harvested in the lands of that region which are now accessible to railroads this year and the country has hardly been touched."

The American Invasion.

Americans and other immigrants are coming in by the thousands. Husky young fellows with two, three, five and ten thousand dollars apiece in their pockets are buying lands and settling. I met scores of them wherever I went, out there along the line of our road. They wanted to know whether the road would be actually built; and when I told them there was not a doubt of it they said they would go ahead and buy. They have bought, and buying is going on everywhere there to-day.

"I saw settlers who were coming in with all their belongings from Nebraska, Kansas, Iowa and the Dakotas. They had sold their farms and were ready to take the cheap lands and make new ones. The situation is such that a man can plow and have a wheat crop the year after he settles, and one young fellow of twenty-eight whom I met told me he had paid for his land, his moving, and his stock with his first crop, and had money in the bank. I don't mean to say that that is a common occurrence, but it is what one young man did."

Edmonton and Its Future.

"How about the towns along the line of the Grand Trunk Pacific?"

"The road is not yet laid out, and the town sites are not settled. It passes, as I have said, through Winnipeg, and also

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A Ladies' and Misses' Short Box Covert Coat, satin lined throughout; \$10.00 value. This sale,

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A Covert Coat, full box-plaited back; collarless effect; \$12.50 value. This sale,

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A Long Covert Coat for Ladies, finished with stitched lapped seams; a good value at \$12.50. This sale,

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A 45-inch Fitted Covert Coat, also in black Broadcloth, finished with tailored strapped seams; \$18.50 value. This sale,

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Excellent quality of Covert Coats, also, in black, fitted, loose backs ranging in price from \$20.00 to \$35.00.

Furs Furs Furs

Natural and Sable Squirrel Collars, with fancy clasp; \$8.50 value. This sale,

\$5.00

Blended Mink and Sable Squirrel Stoles and Tie Scarfs; \$18.00 and \$20.00 value. This sale,

\$15.00

Genuine Isabella and Sable Fox Stoles, yard and a half long; \$12.50 value. This sale,

\$8.75

Excellent values in Isabella and Sable Fox Stoles, also the new cape effect; \$25.00 values. This sale,

\$20.00

A large variety of Minks and Sable Squirrel, fashioned in the latest styles. Only the best fur used. Cafe effects, Stoles and Tie Scarfs. These are specially priced for the sale, \$15.00 to \$50.00.

Muffs to match all furs. Prices to suit you.

through Edmonton in Alberta. Edmonton will, I believe, be the metropolis of that new wheat region. It will probably surpass Winnipeg. The region about there will grow wheat, and also many other crops. The country is underlaid with coal. If a citizen of Edmonton digs a cellar he is likely to find his winter fuel before he gets to the bottom. The town is now reached by a branch of the Canadian Pacific and the Canadian Northern. The Grand Trunk Pacific will, as I have told you, also go through it. It will be a railroad center, and a manufacturing and commercial one as well."

Rival Cities.

"What is the size of Edmonton?"

"It has about 7,000. Strathcona, just across the Saskatchewan River, has about 1,000. The two places are bitter rivals. If one can't get a certain thing it wants, it is bound the other shall not have it, and fights to prevent it."

"The two places are much as St. Paul and Minneapolis were years ago. They should unite and work together. It is somewhat the same with the flour-milling and exporting towns of Port Arthur and Fort Williams, on Lake Superior. They are close together, and their rivalry is as bitter as the feuds of the mountains of Kentucky and Tennessee."

Port Simpson: On the Pacific.

"What is to be the future of your terminal on the Pacific?"

"There will be a great city there," said the vice-president of the Grand Trunk Pacific system. "I have not yet picked out the exact spot, but we shall, of course, and our plans will be such that the town will be a beautiful one. It will be so arranged as to admit of expansion along rational and artistic lines. The best of landscape gardeners will aid us, and the port will be beautiful, as well as most conveniently and commercially arranged. The whole city will be planned out upon paper before a street is surveyed; it will be done somewhat as Dally was planned by the Russians before it had either railroad or citizens."

What kind of surroundings has Port Simpson?"

"Fine!" replied Mr. Morse. "I was there last year. The trip north from Vancouver is as full of grand scenery as any part of the Norwegian coast. This is what travelers say who have visited both places. The climate of that part of British Columbia is affected by the Japan current, and the vegetation is green all the year around. The islands are mountainous, and you wind in and out among them under great walls of green. It is indescribable."

The Short Cut to Japan.

"Do you expect to command a fair share of the Oriental trade?"

"Most assuredly, we do. We shall have the shortest route to the Orient and the shortest out from western Europe across North America to Japan, China and Siberia. All the great transpacific steamers sailing by the northern route from San Francisco, Portland, Tacoma, Seattle and Vancouver have to go about 500 miles northward along the line of the great circle on their way to Japan. They have to come to our latitude to cross over by the shortest way. We save all that distance. We can make the trip from Port Simpson in less than a week, at least one day less than it can be made from any of the other Pacific coast ports. Our trip across the Atlantic is also shorter. The distance from Liverpool to Halifax is 1,100 miles more than 2,400 miles, while the distance from Liverpool to New York is 2,000."

"When the road is completed and our steamers are running we shall have from 1,000 to 1,500 more miles of an advantage over any other route between England and Asia, and the trip can be made in one or two days' less time. Passengers from New York can go to Montreal and thence over our line to Japan and save more than 500 miles over San Francisco via Chicago and 1,200 miles over the route from the port via Galveston. Buffalo can save more than 600 miles via

San Francisco and more than 700 via the Canadian Pacific and Vancouver. We shall have fast steamers across both oceans, and, I doubt not, we shall have what the other lines will consider more than our share of the trade."

On the Eastern Division.

"What can you tell me about the eastern division?"

"It is also largely unexplored. We know that there is a block of good land stretching from the boundary of the province of Quebec westward comprising an area as large as that of West Virginia, or over 15,000,000 acres, which is nearly all good farming land. It is a clay loam, well watered, and rich. We know that the line goes for hundreds of miles through some of the best forests of Canada. There is enough pulp wood there to make your newspapers for generations to come and billions of feet of pine and hardwoods."

PI • G. CARPENTER.

MAY LOSE HIS LIFE.

Hand Was Cut in Circular Saw and Blood Poisoning Develops.

(Special to The Times-Dispatch.)
ROYNOR, Va., November 18.—A peculiar saw case and one that may prove fatal is that of Mr. Leo Leber, a sawyer for Mr. C. O. Alexander, sheriff of Hanover county. While filing a circular saw of few days ago cut one of his fingers slightly. He did not give it much attention at first, and the hand had begun to swell, causing intense pain. His family physician was called, and a diagnosis revealed that blood poisoning had developed. Every precaution of medical science is being taken to save the hand and arm. A consultation was held to-day by Dr. C. L. Bailey and his associate, to take the necessary precautions to save the limb.

It was pitiful in the extreme to see the weeping wife and her eight little children when the sad news was told by the doctor, Doctor Bailey.

The beautiful Christian home of a few days ago, when all was sunshine and happiness, has suddenly been over-shadowed by grief and sorrow. Nothing is left undone to comfort the grief-stricken family, and to soothe the pain of the unfortunate husband and father by kind neighbors and friends.

Shack Johnson, a worthy colored man, had his house destroyed by fire a few days ago. The family barely escaped with their lives. A little furniture was saved. Everything is a total loss. Not one cent of insurance was carried.

William Harris, another old colored man, while working at a corn shucker, had his hand caught in some machinery and so badly lacerated that he had to be taken to Richmond, where the hand was amputated.

Quality in Persimmons.

Reports received over the State indicate that the nut and persimmon crop of Missouri this fall will be a record-breaker. The black and English walnut trees are full of nuts, as are the hickory trees. Hazelnuts are also very plentiful, and the few chestnut trees in the State are reported to be loaded. The season has been very good for persimmons, and this Missouri fruit will not only be plentiful, but of remarkably good quality.

Norborne (Mo.) Leader, with permission.

STATE POEMS

Mr. Theodore F. Allen, of Cincinnati, recently printed in the National Tribune the State poems of four States, among them that of Virginia. Mr. Allen expresses the hope that the publication of these may incite the poets to furnish poems for the other States. These are the four printed:

Virginia

"The roses nowhere bloom so white
As in Virginia.
The sunshine nowhere shines so bright
As in Virginia.
The birds nowhere sing so sweet,
And nowhere hearts so lightly beat,
For heaven and earth seem both to meet
Down in Virginia."

"There is nowhere a land so fair
As in Virginia.
So full of song and free of care
As in Virginia.
And I believe that Happy Land
The Lord prepared for mortal man,
Is built exactly on the plan
Of old Virginia."

"The days are nowhere quite so long
As in Virginia.
Nor quite so filled with happy song
As in Virginia.
So when my time has come to die,
Just take me back and let me lie,
Where the noble James gives rolling by,
Down in Virginia."

Kentucky

"The moonlight is the softest
In Kentucky.
Summer days come ofttest
In Kentucky.
Friendship is the strongest,
Love's forces glow the longest,
Yet a wrong is always wrongest,
In Kentucky."

"The sun shines ever brightest
In Kentucky.
The breezes whisper lightest,
In Kentucky.
Plain girls are the fewest,
Maiden's eyes are bluest,
Their little hearts are trueest,
In Kentucky."

"Life's burdens bear the lightest
In Kentucky.
The home fires burn the brightest,
In Kentucky.
While the players are the keenest,
Cards come out the meanest,
The pocket empties cleanest,
In Kentucky."

"Orators are the grandest,
In Kentucky.
Officials are the blandest,
In Kentucky.
Boys are all the fleetest,
Dancer ever highest,
Taxes are the lightest,
In Kentucky."

"The blue grass waves the bluest
In Kentucky.
Yet bluebirds are the fewest (?)
In Kentucky.
Moonshine is the clearest,
By no means the dearest,
And yet it acts the queerest,
In Kentucky."

"The dove notes are the saddest,
In Kentucky.
The streams dance on the gladdest,
In Kentucky.
Hip pockets are the thickest,
Pistol hands are slickest,
Cylinders turn the quickest,
In Kentucky."

"Song birds are the sweetest,
In Kentucky.
Thoroughbreds the fleetest
In Kentucky.
The mountains tower the proudest,
Thunder rumbles the loudest,
The landscape is the grandest,
And Politics the damdest,
In Kentucky."

Illinois

"By the rivers gently flowing, Illinois,
Illinois,
O'er thy prairies verdant growing, Illinois,
Illinois,
Comes an echo on the breeze, rustling
thru' the leafy trees,
And its mellow tones are these, Illinois,
Illinois."

"From a wilderness of prairies, Illinois,
Illinois,
Straight the way and never varies, Illinois,
Illinois,
Till upon the inland sea stands thy great
commercial tree,
Turning all the world to thee, Illinois,
Illinois,
Turning all the world to thee, Illinois."

"When your country heard you calling,
Illinois, Illinois,
Where the shot and shell were falling,
Illinois, Illinois,
When the southern host withdrew, plit-
ting gray against the blue,
There were none more brave than you,
Illinois, Illinois,
There were none more brave than you,
Illinois, Illinois."

"Not without thy wondrous story, Illinois,
Illinois,
Can be writ the nation's glory, Illinois,
Illinois,
On the record of the years, Abram Lin-
coln's name appears,
Grant and Logan and our tears, Illinois,
Illinois,
Grant and Logan and our tears, Illinois,
Illinois."

Ohio

"The sun never shone on a country more
fair
Than beautiful, peerless Ohio,
There's life in a kiss of her rarified air,
Ohio, prolific Ohio.
Her sons are valiant and noble and
bright,
Her beautiful daughters are just about
right,
And her babies, God bless them, are clear
out of sight.
That crop never fails in Ohio."

"Our homes are alight with a halo of
love,
Ohio, contented Ohio;
We bask in the smiles of the heavens
above—
No cloud ever darkens Ohio,
Our grain waves its billows of gold in
the sun,
The fruits of our orchards are equaling
by none,
And our pumpkins, some of them, weigh
most a ton—
We challenge the world in Ohio!"

"Our girls are sweet models of maidenly
grace,
In this modern Eden, Ohio,
They are perfect in figure and lovely in
face,
That's just what they are in Ohio,
Their smiles are bewitching and winning
and sweet,
Their dresses are stylish, yet modest and
neat,
A fellow would envy their cute little
feet,
In beautiful, peerless Ohio."

"When the burdens of life I am called to
lay down,
I hope I may die in Ohio,
I never could ask a more glorious crown
Than one of the sod of Ohio,
And when the last trump wakes the land



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and sea,
And the tombs of the earth set their
prisoners free,
You may all go aloft if you choose, but
for me,
I think I'll just stay in Ohio."

Birds Are Scarce.

(Special to The Times-Dispatch.)
STODDETT, Nov. 18.—Very few birds are reported, indeed not enough to put a difference in the game. The farmers are endeavoring to protect the game against such depredations, by posting their lands.

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